

REMARKS

Entry of the foregoing amendments is respectfully requested. Claims 6, 11, 13, and 20 have been amended. Claims 4-23 are currently pending in the application. Favorable reconsideration and allowance of this application is respectfully requested in light of the foregoing amendments and the remarks that follow.

1. Objections to the Drawings

In the Office Action the Examiner has objected to the drawing figures as including duplicate reference characters for the same elements, as not including certain reference characters utilized in the specification, and as having unclear reference characters and drawing figures.

Applicant respectfully traverses the Examiner's objections to the drawing figures. More specifically, with this response applicant submits five corrected drawing sheets including Figs. 1-17 that remove the duplicate reference characters for the ribs, that remove the duplicate reference characters not illustrated in the figures, that remove those reference characters from the specification not shown in the drawing figures, though reference character 142 was present in original Fig. 10, and that clarify the reference characters in the figures. Applicant has removed Figs. 18-20 from the application, and has amended the specification accordingly to remove references to these figures. As such, applicant respectfully requests that the Examiner withdraw the objections to the drawing figures.

2. Objections to the Specification

In the Office Action the Examiner has objected to the specification as including certain informalities specified by the Examiner, and for incorrectly incorporating essential subject matter by reference.

Applicant respectfully traverses the Examiner's objections to the specification. More specifically, with this response, applicant has amended the specification to remove the informalities identified by the Examiner. Further, the subject matter incorporated by reference in the specification is not essential to the invention, but merely specifies one exemplary manner in

which the roofing tiles that are the subject of this application can be assembled into a roof for a building structure. Therefore, applicant respectfully requests that the Examiner withdraw the objections to the specification.

3. Objections to the Claims

In the Office Action the Examiner has objected to the claims as including certain informalities identified by the Examiner in certain of the claims.

Applicant respectfully traverses the Examiner's objections to the claims. More specifically, with this response applicant has amended the claims including the informalities identified by the Examiner to remove these informalities. Thus, applicant respectfully requests that the Examiner withdraw the objections to the claims.

4. Claim Rejections Under 35 U.S.C. § 112

In the Office Action the Examiner has rejected claims 5, 12 and 19 under 35 U.S.C. § 112 as failing to comply with the written description requirement. In particular, claims 5, 12 and 19 have been rejected as including subject matter not disclosed in the application, and claim 22 lacks proper antecedent basis for one limitation of that claim.

Applicant respectfully traverses the Examiner's rejection of claims 5, 12, 19 and 22. More specifically, with this response applicant has amended each of claims 5, 12 and 19 to state that the lower closed end is adapted to overlap the lower open end of an adjacent tile. Additionally, after reviewing claim 18, from which claim 22 depends, claim 18 states on the second-to-last line that "the channel and side overlap further having complementary profiles to establish side-to-side centering between adjacent installed tiles." Thus, in applicant's opinion, claim 18 does provide proper antecedent basis for the limitation of side-to-side self-centering present in claim 22. Therefore, applicant respectfully requests that the Examiner withdraw the rejections to claims 5, 12, 19 and 22.

5. Rejections Based on Prior Art under 35 U.S.C. § 103(a)

a. Claims 4, 7, 9 and 10

In the Office Action, the Examiner has rejected claims 4, 7, 9 and 10 under 35 U.S.C. § 103(a) as being unpatentable over Elzey U.S. Patent No. 1,124,001 (the '001 patent), in light of Batcheller U.S. Patent No. 1,740,217 (the '217 patent) and Papsdorf U.S. Patent No. 4,787,190 (the '190 patent).

Applicant respectfully traverses the Examiner's rejections to 4, 7, 9 and 10 based on the '001, '217 and '190 patents. More specifically, claim 4 specifies that the tile include on the back of the image section non-uniform reinforcing ribs that extend from the back of the image section no further than the datum plane. As stated in the specification on page 11, paragraph [0044], lines 11-24, the reinforcing ribs 28 are characterized as being formed as random, non-uniform, non-straight ribs that impart a unique non-uniform discoloration characteristic to the tile images 24. Thus, the non-uniform ribs are defined in the specification as being random and non-straight in configuration.

In contrast, the '217 patent, which is cited by the Examiner as disclosing the non-uniform ribs required by claim 4 and not disclosed in either the '001 or '190 patents, discloses a shingle that includes supporting ribs 26, 27, 30, 31 and 32 located on an inner surface of the shingle. These ribs are each formed to be generally straight along their entire length, and are located on each of the shingles in a standard and repeating configuration as best shown in Fig. 5 of the '217 patent. Because the configuration for the ribs 26, 27 and 30-32 is the same for each shingle, the ribs will cause a uniform discoloration pattern to be created on each shingle, which is directly opposite of the structure and purpose of the non-uniform ribs required by claim 4. Therefore, the ribs 26, 27 and 30-32 in the '217 patent are not non-uniform within the definition for this term in the present application, and as is required by claim 4.

As a result, the subject matter of claim 4 is not disclosed or suggested by the combination of the '001, '217 and '190 patents, such that claim 4, as well as claims 7, 9 and 10 that depend from claim 4, is allowable. Therefore, applicant respectfully requests that the Examiner withdraw the rejection to claims 4, 7, 9 and 10.

b. Claim 5

In the Office Action, the Examiner has also rejected claim 5 under 35 U.S.C. § 103(a) as being unpatentable over the '001, '217 and '190 patents and further in view of Noone et al. U.S. Patent No. 6,178,703 (the '703 patent).

Applicant respectfully traverses the Examiner's rejection of claim 5 based on the '001, '217, '190 and '703 patents. More specifically, claim 5 depends from claim 4, and therefore includes each of the limitations of claim 4, including the limitation of the non-uniform ribs extending rearwardly from the back of the image section. As stated previously in overcoming the rejection of claim 4, none of the '001, '217 or '190 patents disclose or suggest this limitation.

The '703 patent is further unable to overcome the deficiencies of those references. More particularly, the '703 patent discloses a roofing tile 10 with a back surface including a number of transverse and vertical webs 62-67 extending across the back surface of the tile 10. These webs 62-67 are each straight in configuration and are arranged in a uniform pattern on each individual tile 10. Therefore, the '703 patent does not disclose or suggest a tile including non-uniform ribs extending rearwardly from an image section of the tile as required by claim 4.

As a result, the subject matter of claim 4 is neither shown nor suggested by the combination of the '001, '217, '190 and '703 patents, such that claim 5, which depends from claim 4, is allowable. Applicant therefore respectfully requests that the Examiner withdraw the rejections to claim 5.

c. Claim 6

In the Office Action, the Examiner has also rejected claim 6 under 35 U.S.C. § 103(a) as being unpatentable over the '001, '217 and '190 patents and further in view of Fifield et al. U.S. Patent No. 5,070,671 (the '671 patent).

Applicant respectfully traverses the Examiner's rejection of claim 6 based on the '001, '217, '190 and '671 patents. More specifically, claim 6 depends from claim 4, and therefore includes each of the limitations of claim 4, including the limitation of the non-uniform ribs

extending rearwardly from the back of the image section. As stated previously in overcoming the rejection of claim 4, none of the '001, '217 or '190 patents disclose or suggest this limitation.

The '671 patent is further unable to overcome the deficiencies of those references. More particularly, the '671 patent discloses a roofing tile 1 with a back surface having a uniform construction including an undersurfaces 3 having hollowed-out section 11 therein. The undersurface 3 and these sections 11 are arranged in a uniform pattern on each individual tile 1. Therefore, the '671 patent does not disclose or suggest a tile including non-uniform ribs extending rearwardly from an image section of the tile as required by claim 4.

As a result, the subject matter of claim 4 is neither shown nor suggested by the combination of the '001, '217, '190 and '671 patents, such that claim 6, which depends from claim 4, is allowable. Applicant therefore respectfully requests that the Examiner withdraw the rejections to claim 6.

d. Claim 8

In the Office Action, the Examiner has also rejected claim 8 under 35 U.S.C. § 103(a) as being unpatentable over the '001, '217 and '190 patents and further in view of Bremer U.S. Patent No. 2,482,835 (the '835 patent).

Applicant respectfully traverses the Examiner's rejection of claim 8 based on the '001, '217, '190 and '835 patents. More specifically, claim 8 depends from claim 4, and therefore includes each of the limitations of claim 4, including the limitation of the non-uniform ribs extending rearwardly from the back of the image section. As stated previously in overcoming the rejection of claim 4, none of the '001, '217 or '190 patents disclose or suggest this limitation.

The '835 patent is further unable to overcome the deficiencies of those references. More particularly, the '835 patent discloses a roofing tile with a back surface having a uniform construction including depending flanges 6 and 7. The depending flanges 6 and 7 are arranged in a uniform pattern on each individual tile. Therefore, the '835 patent does not disclose or suggest a tile including non-uniform ribs extending rearwardly from an image section of the tile as required by claim 4.

As a result, the subject matter of claim 4 is neither shown nor suggested by the combination of the '001, '217, '190 and '835 patents, such that claim 8, which depends from claim 4, is allowable. Applicant therefore respectfully requests that the Examiner withdraw the rejections to claim 8.

e. Claims 11, 14, 16 and 17

In the Office Action, the Examiner has rejected claims 11, 14, 16 and 17 under 35 U.S.C. § 103(a) as being unpatentable in light of the '001 and '190 patents.

Applicant respectfully traverses the Examiner's rejections to 11, 14, 16 and 17 based on the '001 and '190 patents. More specifically, with this response applicant has amended claim 11 to include the limitation found in claim 4 of non-uniform reinforcing ribs that extend from the back of the image section no further than the datum plane. As stated in the specification on page 11, paragraph [0044], lines 11-24, the reinforcing ribs 28 are characterized as being formed as random, non-uniform, non-straight ribs that impart a unique non-uniform discoloration characteristic to the tile images 24. Thus, the non-uniform ribs now required by claim 11 are defined in the specification as being random and non-straight in configuration.

In contrast, the non-uniform ribs are a feature not disclosed in either the '001 or '190 patents, as stated previous in the Office Action regarding the Examiner's rejection of claim 4. Further, the '217 patent, which is cited by the Examiner as disclosing the non-uniform ribs required by claim 4 and added in this response to claim 11, discloses a shingle that includes supporting ribs 26, 27, 30, 31 and 32 located on an inner surface of the shingle. These ribs are each formed to be generally straight along their entire length, and are located on each of the shingles in a standard and repeating configuration as best shown in Fig. 5 of the '217 patent. Because the configuration for the ribs 26, 27 and 30-32 is the same for each shingle, the ribs will cause a uniform discoloration pattern to be created on each shingle, which is directly opposite of the structure and purpose of the non-uniform ribs required by claim 4. Therefore, the ribs 26, 27 and 30-32 in the '217 patent are not non-uniform within the definition for this term in the present application, and as required by claim 11.

As a result, the subject matter of claim 11 is not disclosed or suggested by the combination of the '001, '217 and '190 patents, such that claim 11, as well as claims 14, 16 and 17 that depend from claim 11, is allowable. Therefore, applicant respectfully requests that the Examiner withdraw the rejection to claims 11, 14, 16 and 17.

f. Claim 12

In the Office Action, the Examiner has also rejected claim 12 under 35 U.S.C. § 103(a) as being unpatentable over the '001 and '190 patents, and further in view of the '703 patent.

Applicant respectfully traverses the Examiner's rejection of claim 12 based on the '001, '190 and '703 patents. More specifically, claim 12 depends from amended claim 11, and therefore includes each of the limitations of claim 11, including the limitation of the non-uniform ribs extending rearwardly from the back of the image section added with this response. As stated previously in overcoming the rejection of claim 11, neither of the '001 or '190 patents disclose or suggest this limitation.

The '703 patent is further unable to overcome the deficiencies of those references. More particularly, the '703 patent discloses a roofing tile 10 with a back surface including a number of transverse and vertical webs 62-67 extending across the back surface of the tile 10. These webs 62-67 are each straight in configuration and are arranged in a uniform pattern on each individual tile 10. Therefore, the '703 patent does not disclose or suggest a tile including non-uniform ribs extending rearwardly from an image section of the tile as required by claim 11.

As a result, the subject matter of claim 11 is neither shown nor suggested by the combination of the '001, '190 and '703 patents, such that claim 12, which depends from claim 11, is allowable. Applicant therefore respectfully requests that the Examiner withdraw the rejections to claim 12.

g. Claim 13

In the Office Action, the Examiner has also rejected claim 13 under 35 U.S.C. § 103(a) as being unpatentable over the '001 and '190 patents, and further in view of the '671 patent.

Applicant respectfully traverses the Examiner's rejection of claim 13 based on the '001, '190 and '671 patents. More specifically, claim 13 depends from amended claim 11, and therefore includes each of the limitations of claim 11, including the limitation of the non-uniform ribs extending rearwardly from the back of the image section added with this response. As stated previously in overcoming the rejection of claim 11, neither of the '001 or '190 patents disclose or suggest this limitation.

The '671 patent is further unable to overcome the deficiencies of those references. More particularly, the '671 patent discloses a roofing tile 1 with a back surface having a uniform construction including an undersurfaces 3 having hollowed-out section 11 therein. The undersurface 3 and these sections 11 are arranged in a uniform pattern on each individual tile 1. Therefore, the '671 patent does not disclose or suggest a tile including non-uniform ribs extending rearwardly from an image section of the tile as required by claim 11.

As a result, the subject matter of claim 11 is neither shown nor suggested by the combination of the '001, '190 and '671 patents, such that claim 13, which depends from claim 11, is allowable. Applicant therefore respectfully requests that the Examiner withdraw the rejections to claim 13.

h. Claim 15

In the Office Action, the Examiner has also rejected claim 15 under 35 U.S.C. § 103(a) as being unpatentable over the '001 and '190 patents and further in view of the '835 patent.

Applicant respectfully traverses the Examiner's rejection of claim 15 based on the '001, '190 and '835 patents. More specifically, claim 15 depends from amended claim 11, and therefore includes each of the limitations of claim 11, including the limitation of the non-uniform ribs extending rearwardly from the back of the image section added with this response. As stated previously in overcoming the rejection of claim 11, neither of the '001 or '190 patents disclose or suggest this limitation.

The '835 patent is further unable to overcome the deficiencies of those references. More particularly, the '835 patent discloses a roofing tile with a back surface having a uniform

construction including depending flanges 6 and 7. The depending flanges 6 and 7 are arranged in a uniform pattern on each individual tile. Therefore, the '835 patent does not disclose or suggest a tile including non-uniform ribs extending rearwardly from an image section of the tile as required by claim 11.

As a result, the subject matter of claim 11 is neither shown nor suggested by the combination of the '001, '190 and '835 patents, such that claim 15, which depends from claim 11, is allowable. Applicant therefore respectfully requests that the Examiner withdraw the rejections to claim 15.

i. Claims 18 and 21-23

In the Office Action, the Examiner has rejected claims 18 and 21-23 under 35 U.S.C. § 103(a) as being unpatentable in light of the '001, '217, '190 and '835 patents.

Applicant respectfully traverses the Examiner's rejections to 18 and 21-23 based on the '001, '217, '190 and '835 patents. More specifically, claim 18 includes the limitation of non-uniform reinforcing ribs that extend from the back of the image section no further than the datum plane. As stated in the specification on page 11, paragraph [0044], lines 11-24, the reinforcing ribs 28 are characterized as being formed as random, non-uniform, non-straight ribs that impart a unique non-uniform discoloration characteristic to the tile images 24. Thus, the non-uniform ribs now required by claim 11 are defined in the specification as being random and non-straight in configuration.

In contrast, the non-uniform ribs are a feature not disclosed in either the '001, '190 or '835 patents, as stated previously in the Office Action regarding the Examiner's rejection of claims 4 and 8. Further, the '217 patent, which is cited by the Examiner as disclosing the non-uniform ribs required by claim 18, discloses a shingle that includes supporting ribs 26, 27, 30, 31 and 32 located on an inner surface of the shingle. These ribs are each formed to be generally straight along their entire length, and are located on each of the shingles in a standard and repeating configuration as best shown in Fig. 5 of the '217 patent. Because the configuration for the ribs 26, 27 and 30-32 is the same for each shingle, the ribs will cause a uniform discoloration

pattern to be created on each shingle, which is directly opposite of the structure and purpose of the non-uniform ribs required by claim 18. Therefore, the ribs 26, 27 and 30-32 in the '217 patent are not non-uniform within the definition for this term in the present application, and as required by claim 18.

As a result, the subject matter of claim 18 is not disclosed or suggested by the combination of the '001, '217, '190 and '835 patents, such that claim 18, as well as claims 21-23 that depend from claim 18, is allowable. Therefore, applicant respectfully requests that the Examiner withdraw the rejection to claims 18 and 21-23.

j. Claim 19

In the Office Action, the Examiner has rejected claims 19 under 35 U.S.C. § 103(a) as being unpatentable in light of the '001, '217, '190 and '835 patents, further in view of the '703 patent.

Applicant respectfully traverses the Examiner's rejection of claim 19 based on the '001, '217, '190, '835 and '703 patents. More specifically, claim 19 depends from amended claim 18, and therefore includes each of the limitations of claim 18, including the limitation of the non-uniform ribs extending rearwardly from the back of the image section. As stated previously in overcoming the rejection of claim 18, none of the '001, '217, '190 or '835 patents disclose or suggest this limitation.

The '703 patent is further unable to overcome the deficiencies of those references. More particularly, the '703 patent discloses a roofing tile 10 with a back surface including a number of transverse and vertical webs 62-67 extending across the back surface of the tile 10. These webs 62-67 are each straight in configuration and are arranged in a uniform pattern on each individual tile 10. Therefore, the '703 patent does not disclose or suggest a tile including non-uniform ribs extending rearwardly from an image section of the tile as required by claim 18.

As a result, the subject matter of claim 18 is neither shown nor suggested by the combination of the '001, '217, '190, '835 and '703 patents, such that claim 19, which depends

from claim 18, is allowable. Applicant therefore respectfully requests that the Examiner withdraw the rejections to claim 19.

k. Claim 20

In the Office Action, the Examiner has rejected claims 18 and 21-23 under 35 U.S.C. § 103(a) as being unpatentable in light of the '001, '217, '190 and '835 patents, further in view of the '671 patent.

Applicant respectfully traverses the Examiner's rejection of claim 20 based on the '001, '217, '190, '835 and '671 patents. More specifically, claim 20 depends from amended claim 18, and therefore includes each of the limitations of claim 18, including the limitation of the non-uniform ribs extending rearwardly from the back of the image section. As stated previously in overcoming the rejection of claim 18, none of the '001, '217, '190 or '835 patents disclose or suggest this limitation.

The '671 patent is further unable to overcome the deficiencies of those references. More particularly, the '671 patent discloses a roofing tile 1 with a back surface having a uniform construction including an undersurfaces 3 having hollowed-out section 11 therein. The undersurface 3 and these sections 11 are arranged in a uniform pattern on each individual tile 1. Therefore, the '671 patent does not disclose or suggest a tile including non-uniform ribs extending rearwardly from an image section of the tile as required by claim 18.

As a result, the subject matter of claim 18 is neither shown nor suggested by the combination of the '001, '217, '190, '835 and '671 patents, such that claim 20, which depends from claim 18, is allowable. Applicant therefore respectfully requests that the Examiner withdraw the rejections to claim 20.

Power of Attorney and Change of Correspondence Address

A Power of Attorney dated April 29, 2007, which is believed to have been filed in the U.S. Patent Office, is enclosed. Also enclosed is a Change of Correspondence Address form requesting that all future communication be directed to Customer No. 23598.

Petition and Request for Extension of Time

Applicant requests a three-month extension of time from June 2, 2007 to September 2, 2007 in which to respond to the Office Action dated March 2, 2007. Authorization is given to charge the three-month extension fee (\$1020) and the petition to revive an unintentionally abandoned application fee (\$1500) to Deposit Account No. 50-1170. In addition, authorization is given to charge any additional fees or credit any overpayment in connection with this or any future communication to Deposit Account No. 50-1170.

CONCLUSION

It is submitted that claims 4-23 are in compliance with 35 U.S.C. §§ 112 and 103, and each define patentable subject matter. A Notice of Allowance is therefore respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it would help expedite the allowance of this application.

Respectfully submitted,



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